

**Northwestern CT Community College
Course Syllabus**

Course Title: Introduction to Engineering

Course #: EGR 111

Course Description:

Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include: sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, robotics, manufacturing technologies, and fundamentals of engineering economics.

Credits: 3

Pre-requisite/Co-requisite: “C” or better in MAT* 137, MAT* 137X, MAT 137M, or MAT 137P or higher AND placement into ENG* 101.

Goals: The main goals of this course are to prepare students for the rigor of future engineering classes, to provide students with a solid foundation of basic engineering skills, and to introduce students to the different engineering majors and career options.

Outcomes: Upon successful completion of this course, the student will be able to do the following:

1. Describe the engineering profession and its various disciplines
2. Compare the three main approaches to engineering problem solving
3. Solve engineering problems using the scientific method
4. Utilize the tools, materials, techniques, and technical processes of engineering and technology when solving technical problems.
5. Identify and demonstrate various problem solving tools used in engineering
6. Identify and apply the design principles of engineering and technology when solving basic engineering problems.
7. Write and discuss technology information effectively
8. Explain the importance of ethics in engineering